Abstract of the Invention

The invention provides methods and compositions for inducing and maintaining tolerance to epitopes or antigens containing the epitopes. The compositions include expression cassettes and vectors including DNA sequences coding for a fusion immunoglobulin operably linked to transcriptional and translational control regions functional in a hemopoietic or lymphoid cell. The fusion immunoglobulin includes at least one heterologous tolerogenic epitope at the N-terminus variable region of the immunoglobulin. Cells stably transformed with the expression vector are formed and used to produce fusion immunoglobulin. The invention also provides methods for screening for novel tolerogenic epitopes and for inducing and maintaining tolerance. The methods of the invention are useful in the diagnosis and treatment of autoimmune or allergic immune responses.